# A2 HW Technocracy Aff

## OFF

### 1NC – Util

#### The standard is maximizing expected wellbeing.

#### No act omission distinction for states since their implicit approvals of actions still entail moral responsibility

Sunstein 05

[Cass R. Sunstein and Adrian Vermeule. The University of Chicago Law School. “Is Capital Punishment Morally Required? The Relevance of Life‐Life Tradeoffs.” JOHN M. OLIN LAW & ECONOMICS WORKING PAPER NO. 239. The Chicago Working Paper Series. March 2005] AJ

In our view, both the argument from causation and the argument from intention go wrong by overlooking the distinctive features of government as a moral agent. Whatever the general status of the act-omission distinction as a matter of moral philosophy,38 the distinction is least impressive when applied to government.39 The most fundamental point is that unlike individuals, governments always and necessarily face a choice between or among possible policies for regulating third parties. The distinction between acts and omissions may not be intelligible in this context, and even if it is, the distinction does not make a morally relevant difference. Most generally, government is in the business of creating permissions and prohibitions. When it explicitly or implicitly authorizes private action, it is not omitting to do anything, or refusing to act.40 Moreover, the distinction between authorized and unauthorized private action—for example, private killing—becomes obscure when the government formally forbids private action, but chooses a set of policy instruments that do not adequately or fully discourage it.

#### Ethical uncertainty means we should prevent existential risk to ensure the future has value regardless of true moral theory. It’s an epistemic prerequisite

Bostrom 11 [Nick Bostrom. “Existential Risk Prevention As the Most Important Task for Humanity”, 2011, Faculty of Philosophy at Oxford]

These reflections on moral uncertainty suggest an alternative, complementary way of looking at existential risk; they also suggest a new way of thinking about the ideal of sustainability. Let me elaborate.¶ Our present understanding of axiology might well be confused. We may not now know — at least not in concrete detail — what outcomes would count as a big win for humanity; we might not even yet be able to imagine the best ends of our journey. If we are indeed profoundly uncertain about our ultimate aims, then we should recognize that there is a great option value in preserving — and ideally improving — our ability to recognize value and **to** steer the future accordingly. Ensuring that there will be a future version of humanity with great powers and a propensity to use them wisely is plausibly the best way available to us to increase the probability that the future will contain value.

#### Extinction is the worst harm to health and wellbeing, both of which are impacts in the AC.

### 1NC – Desal

#### Nuclear power is key to stable desalinization – demand is high and rising

IAEA 15 [-- widely known as the world's "Atoms for Peace" organization within the United Nations family. Set up in 1957 as the world's centre for cooperation in the nuclear field, the Agency works with its Member States and multiple partners worldwide to promote the safe, secure and peaceful use of nuclear technologies, “New Technologies for Seawater Desalination Using Nuclear Energy,” IEAE TecDoc Series, 2015]

It is anticipated that by 2025, 33% of the world population, or more than 1.8 billion people, will live in countries or regions without adequate supplies of water unless new desalination plants become operational. In many areas, the rate of water usage already exceeds the rate of replenishment. Nuclear reactors have already been used for desalination on relatively small-scale projects. In total, more than 150 reactor-years of operating experience with nuclear desalination has been accumulated worldwide. Eight nuclear reactors coupled to desalination projects are currently in operation in Japan. India commissioned the ND demonstration project in the year 2008 and the plant has been in continuous operation supplying demineralised (DM) quality water to the nuclear power plant and potable quality to the reservoir. Pakistan has launched a similar project in 2010. However, the great majority of the more than 7500 desalination plants in operation worldwide today use fossil fuels with the attendant emission of carbon dioxide and other GHG. Increasing the use of fossil fuels for energy-intensive processes such as large-scale desalination plants is not a sustainable long-term option in view of the associated environmental impacts. Thus, the main energy sources for future desalination are nuclear power reactors and renewable energy sources such as solar, hydro, or wind, but only nuclear reactors are capable of delivering the copious quantities of energy required for large-scale desalination projects. Algeria is participating in an IAEA’s CRP in the subject related to “New technologies for seawater desalination using nuclear energy’’ with a project entitled “Optimization of coupling nuclear reactors and desalination systems for an Algerian site Skikda”. This project is a contribution to the IAEA CRP to enrich the economic data corresponding to the choice of technical and economical options for coupling nuclear reactors and desalination systems for specific sites in the Mediterranean region

#### Only solution to water shortages

IAEA 15 [-- widely known as the world's "Atoms for Peace" organization within the United Nations family. Set up in 1957 as the world's centre for cooperation in the nuclear field, the Agency works with its Member States and multiple partners worldwide to promote the safe, secure and peaceful use of nuclear technologies, “New Technologies for Seawater Desalination Using Nuclear Energy,” IEAE TecDoc Series, 2015]

Addressing water shortages is a difficult challenge for many countries due to population growth and the increasing need for water to support industry, agriculture and urban development. Innovative water management strategies are certainly needed to preserve water resources. But they may not be sufficient. Throughout the world, many highly populated regions face frequent and prolonged droughts. In these areas, where, for some reason, the natural hydrologic cycle cannot provide people with water, desalination is used to provide people with potable water. Desalination systems fall into two main design categories, namely thermal and membrane types. Thermal designs –including MSF and MED- use flashing and evaporation to produce potable water while membrane designs use the method of RO. Desalination is the main technology being used to augment fresh water resources in water scarce coastal regions. With almost 64.4 million m3 /day (GWI 2012) of worldwide desalination water production capacity, about two third is produced by thermal distillation, mainly in the Middle East. Outside this region, membrane-based systems predominate. Both processes are energy-intensive (Fig. I-1.). Even if power consumption has been reduced as technological innovations, such as energy recovery systems and variable frequency pumps (reverse RO plants), are introduced, it remains the main cost factor in water desalination. Traditionally, fossil fuels such as oil and gas have been the major energy sources. However, fuel price hikes and volatility as well as concerns about long term supplies and environmental release is prompting consideration of alternative energy sources for seawater desalination, such as nuclear desalination and the use of renewable energy sources. Replacing fossil fuel by renewable (solar, wind, geothermal, biomass) or nuclear energy, could reduce the impacts on air quality and climate. FIG. I-1. Typical energy consumption of technologically mature desalination processes. The idea of using nuclear energy to desalinate seawater is not new. Since the USS nautilus was commissioned more than a half century ago, the drinking water on nuclear submarines has come from reactor-powered desalination systems. Today, nuclear desalination is being 106 used by a number of countries, including India and Japan, to provide fresh water for growing populations and irrigation. Commercial uses are also being considered in Europe, the Middle East and South America. The IAEA has always been an important contributor to the R&D effort in nuclear desalination. In 2009, it launched a coordinated research programme entitled “New Technologies for Seawater Desalination using Nuclear Energy”, focusing on the introduction of innovative nuclear desalination technologies, producing desalted water at the lowest possible cost and in a sustainable manner. The French atomic and alternative energies commission (CEA) expressed interest in participating to the CRP. A research proposal, aiming at using CEA software tools to develop optimized nuclear desalination systems was established and submitted to the IAEA. The studies focused on the development of optimized nuclear desalination systems producing large amounts of desalinated water while minimizing the impact on the efficiency of power conversion. Technologically mature desalination processes viz. MEE and RO have been considered for the study. Each of these systems will be modelled using innovative techniques developed in CEA. Models would first be validated (against experimental results published in literature, or obtained through bilateral collaborations involving CEA) and then applied to optimize the energy use in the integrated power and water plants.

#### Water crises cause escalating global conflict

Rasmussen 11 [(Erik, CEO, Monday Morning; Founder, Green Growth Leaders) “Prepare for the Next Conflict: Water Wars” HuffPo 4/12] AT

For years experts have set out warnings of how the earth will be affected by the water crises, with millions dying and increasing conflicts over dwindling resources. They have proclaimed -- in line with the report from the US Senate -- that the water scarcity is a security issue, and that it will yield political stress with a risk of international water wars. This has been reflected in the oft-repeated observation that water will likely replace oil as a future cause of war between nations. Today the first glimpses of the coming water wars are emerging. Many countries in the Middle East, Africa, Central and South Asia -- e.g. Afghanistan, Pakistan, China, Kenya, Egypt, and India -- are already feeling the direct consequences of the water scarcity -- with the competition for water leading to social unrest, conflict and migration. This month the escalating concerns about the possibility of water wars triggered calls by Zafar Adeel, chair of UN-Water, for the UN to promote "hydro-diplomacy" in the Middle East and North Africa in order to avoid or at least manage emerging tensions over access to water. The gloomy outlook of our global fresh water resources points in the direction that the current conflicts and instability in these countries are only glimpses of the water wars expected to unfold in the future. Thus we need to address the water crisis that can quickly escalate and become a great humanitarian crisis and also a global safety problem. A revolution The current effort is nowhere near what is needed to deal with the water-challenge -- the world community has yet to find the solutions. Even though the 'water issue' is moving further up the agenda all over the globe: the US foreign assistance is investing massively in activities that promote water security, the European Commission is planning to present a "Blueprint for Safeguarding Europe's Water" in 2012 and the Chinese government plans to spend $600 billion over the next 10 years on measures to ensure adequate water supplies for the country. But it is not enough. The situation requires a response that goes far beyond regional and national initiatives -- we need a global water plan. With the current state of affairs, correcting measures still can be taken to avoid the crisis to be worsening. But it demands that we act now. We need a new way of thinking about water. We need to stop depleting our water resources, and urge water conservation on a global scale. This calls for a global awareness that water is a very scarce and valuable natural resource and that we need to initiate fundamental technological and management changes, and combine this with international solidarity and cooperation. In 2009, The International Water Management Institute called for a blue revolution as the only way to move forward: "We will need nothing less than a 'Blue Revolution', if we are to achieve food security and avert a serious water crisis in the future" said Dr. Colin Chartres, Director General of the International Water Management Institute. This meaning that we need ensure "more crop per drop": while many developing countries use precious water to grow 1 ton of rice per hectare, other countries produce 5 tons per hectare under similar social and water conditions, but with better technology and management. Thus, if we behave intelligently, and collaborate between neighbors, between neighboring countries, between North and South, and in the global trading system, we shall not 'run out of water'. If we do not, and "business as usual" prevails, then water wars will accelerate.

### 1NC – Warming DA

#### Nuclear power is critical to stop catastrophic warming

Waldman 15 - Susanne, PhD in Risk Communication at Carleton University (“Why we Need Nuclear Power to Save the Environment” <http://energyforhumanity.org/climate-energy/need-nuclear-power-save-environment/>) RMT

The idea we might need nuclear power to save the environment may have seen farfetched thirty years ago, at the height of the anti-nuclear movement. But it’s an idea that more and more scientists of all stripes as well as energy experts and even environmentalists are coming to share.

Last month, 75 biodiversity scientists signed an open letter imploring the environmental and conservation communities to rethink “idealistic” opposition to nuclear energy, given the threats to global ecosystems set in motion by climate change. This open letter follows in the wake of another published a year ago in the New York Times by climate scientists with a similar message: “there is no credible path to climate stabilization that does not include a substantial role for nuclear power.”

These scientists who study the earth and the life on it are concerned it is too risky to rely solely on wind, solar and other so-called “green” power to replace fossil fuels, which are still the fastest growing energy sources by a long shot. As these scientists point out, renewable power sources would require enormous amounts of land, materials, and money to meet the world’s current and growing energy needs.

Wind and solar power are especially problematic because they are intermittent and can’t be dispatched to match demand. While the quest is on for grid storage options, there has not yet been a significant storage breakthrough, and any contribution it ends up making may only be modest.

In the meantime other power sources that can run full time are required to take up the slack. Options for doing so are limited to fossil fuels, biomass that is comparatively bulky and limited in scale, hydro power that is largely tapped out in some places, and nuclear power. The advantage of nuclear power is there is no shortage of suitable sites and it is the most low-footprint form of power generation, taking into account land use, materials, carbon footprint, and fuel density.

History has shown the most effective way to replace fossil fuel power over a 15-year-period is to build up nuclear. Ontarians, who rely on nuclear plants to deliver roughly three-fifths of our power every day, and have become coal-free, know this. So do people in France, where nuclear energy supplies around three quarters of power needs.

The problem is that as a complex form of technology, nuclear plants are relatively pricey to build. Few have been constructed of late in the Western world, during an era of cheap coal and gas, liberalized energy markets, cash-strapped governments, and hyped-up renewables. Experienced work forces who can put them up quickly have become hard to assemble on the fly.

These patterns can alter, though, as people come to recognize that once nuclear plants are up they can churn out steady carbon-free power for over half a century. Moreover the power they provide is typically quite cheap and not sensitive to fuel price volatility.

#### There’s an unquestionable scientific consensus about warming.

Nuccitelli 16 — Dana Nuccitelli, Climate Writer for the *Guardian*, Environmental Scientist at Tetra Tech—a private environmental consulting firm, holds an M.A. in Physics from the University of California-Davis and a B.A. in Astrophysics from the University of California-Berkeley, 2016 (“It’s settled: 90–100% of climate experts agree on human-caused global warming,” *Climate Consensus – The 97%*—a *Guardian* blog about climate change, April 13th, Available Online at <https://www.theguardian.com/environment/climate-consensus-97-per-cent/2016/apr/13/its-settled-90100-of-climate-experts-agree-on-human-caused-global-warming>, Accessed 07-15-2016)

There is an overwhelming expert scientific consensus on human-caused global warming.

Authors of seven previous climate consensus studies — including Naomi Oreskes, Peter Doran, William Anderegg, Bart Verheggen, Ed Maibach, J. Stuart Carlton, John Cook, myself, and six of our colleagues — have co-authored a new paper that should settle this question once and for all. The two key conclusions from the paper are:

1) Depending on exactly how you measure the expert consensus, it’s somewhere between 90% and 100% that agree humans are responsible for climate change, with most of our studies finding 97% consensus among publishing climate scientists.

2) The greater the climate expertise among those surveyed, the higher the consensus on human-caused global warming.

[Graphic Omitted]

Expert consensus is a powerful thing. People know we don’t have the time or capacity to learn about everything, and so we frequently defer to the conclusions of experts. It’s why we visit doctors when we’re ill. The same is true of climate change: most people defer to the expert consensus of climate scientists. Crucially, as we note in our paper:

Public perception of the scientific consensus has been found to be a gateway belief, affecting other climate beliefs and attitudes including policy support.

That’s why those who oppose taking action to curb climate change have engaged in a misinformation campaign to deny the existence of the expert consensus. They’ve been largely successful, as the public badly underestimate the expert consensus, in what we call the “consensus gap.” Only 12% of Americans realize that the consensus is above 90%.

[Video Omitted]

Consensus misrepresentations

Our latest paper was written in response to a critique published by Richard Tol in Environmental Research Letters, commenting on the 2013 paper published in the same journal by John Cook, myself, and colleagues finding a 97% consensus on human-caused global warming in the peer-reviewed literature.

Tol argues that when considering results from previous consensus studies, the Cook 97% figure is an outlier, which he claims is much higher than most other climate consensus estimates. He makes this argument by looking at sub-samples from previous surveys. For example, Doran’s 2009 study broke down the survey data by profession – the consensus was 47% among economic geologists, 64% among meteorologists, 82% among all Earth scientists, and 97% among publishing climate scientists. The lower the climate expertise in each group, the lower the consensus.

[Graph Omitted]

Like several of these consensus surveys, Doran cast a wide net and included responses from many non-experts, but among the experts, the consensus is consistently between 90% and 100%. However, by including the non-expert samples, it’s possible to find low “consensus” values.

The flaw in this approach is especially clear when we consider the most ridiculous sub-sample included in Tol’s critique: Verheggen’s 2015 study included a grouping of predominantly non-experts who were “unconvinced” by human-caused global warming, among whom the consensus was 7%. The only surprising thing about this number is that more than zero of those “unconvinced” by human-caused global warming agree that humans are the main cause of global warming. In his paper, Tol included this 7% “unconvinced,” non-expert sub-sample as a data point in his argument that the 97% consensus result is unusually high.

By breaking out all of these sub-samples of non-experts, the critique thus misrepresented a number of previous consensus studies in an effort to paint our 97% result as an outlier. The authors of those misrepresented studies were not impressed with this approach, denouncing the misrepresentations of their work in no uncertain terms.

We subsequently collaborated with those authors in this newly-published scholarly response, bringing together an all-star lineup of climate consensus experts. The following quote from the paper sums up our feelings about the critique’s treatment of our research:

Tol’s (2016) conflation of unrepresentative non-expert sub-samples and samples of climate experts is a misrepresentation of the results of previous studies, including those published by a number of coauthors of this paper.

Consensus on consensus

In our paper, we show that including non-experts is the only way to argue for a consensus below 90–100%. The greater the climate expertise among those included in the survey sample, the higher the consensus on human-caused global warming. Similarly, if you want to know if you need open heart surgery, you’ll get much more consistent answers (higher consensus) if you only ask cardiologists than if you also survey podiatrists, neurologists, and dentists.

That’s because, as we all know, expertise matters. It’s easy to manufacture a smaller non-expert “consensus” number and argue that it contradicts the 97% figure. As our new paper shows, when you ask the climate experts, the consensus on human-caused global warming is between 90% and 100%, with several studies finding 97% consensus among publishing climate scientists.

There’s some variation in the percentage, depending on exactly how the survey is done and how the question is worded, but ultimately it’s still true that there’s a 97% consensus in the peer-reviewed scientific literature on human-caused global warming. In fact, even Richard Tol has agreed:

The consensus is of course in the high nineties.

Is the consensus 97% or 99.9%?

In fact, some believe our 97% consensus estimate was too low. These claims are usually based on an analysis done by James Powell, and the difference simply boils down to how “consensus” is defined. Powell evaluated the percentage of papers that don’t explicitly reject human-caused global warming in their abstracts. That includes 99.83% of papers published between 1991 and 2012, and 99.96% of papers published in 2013.

In short, 97% of peer-reviewed climate research that states a position on human-caused warming endorses the consensus, and about 99.9% of the total climate research doesn’t explicitly reject human-caused global warming. Our two analyses simply answer different questions. The percentage of experts and their research that endorse the theory is a better description of “consensus.” However, Powell’s analysis is useful in showing how few peer-reviewed scientific papers explicitly reject human-caused global warming.

In any case, there’s really no question that humans are the driving force causing global warming. The experts are almost universally convinced because the scientific evidence is overwhelming. Denying the consensus by misrepresenting the research won’t change that reality.

With all of the consensus authors teaming up to show the 90–100% expert consensus on human-caused global warming, and most finding 97% consensus among publishing climate scientists, this paper should be the final word on the subject.

#### Global warming definitively causes extinction

Sharp and Kennedy 14 – (Associate Professor Robert (Bob) A. Sharp is the UAE National Defense College Associate Dean for Academic Programs and College Quality Assurance Advisor. He previously served as Assistant Professor of Strategic Security Studies at the College of International Security Affairs (CISA) in the U.S. National Defense University (NDU), Washington D.C. and then as Associate Professor at the Near East South Asia (NESA) Center for Strategic Studies, collocated with NDU. Most recently at NESA, he focused on security sector reform in Yemen and Lebanon, and also supported regional security engagement events into Afghanistan, Turkey, Egypt, Palestine and Qatar; Edward Kennedy is a renewable energy and climate change specialist who has worked for the World Bank and the Spanish Electric Utility ENDESA on carbon policy and markets; 8/22/14, “Climate Change and Implications for National Security,” *International Policy Digest*, <http://intpolicydigest.org/2014/08/22/climate-change-implications-national-security/>, Accessed 7/11/16, HWilson)

Our planet is 4.5 billion years old. If that whole time was to be reflected on a single one-year calendar then the dinosaurs died off sometime late in the afternoon of December 27th and modern humans emerged 200,000 years ago, or at around lunchtime on December 28th. Therefore, human life on earth is very recent. Sometime on December 28th humans made the first fires – wood fires – neutral in the carbon balance.

Now reflect on those most recent 200,000 years again on a single one-year calendar and you might be surprised to learn that the industrial revolution began only a few hours ago during the middle of the afternoon on December 31st, 250 years ago, coinciding with the discovery of underground carbon fuels.

Over the 250 years carbon fuels have enabled tremendous technological advances including a population growth from about 800 million then to 7.5 billion today and the consequent demand to extract even more carbon. This has occurred during a handful of generations, which is hardly noticeable on our imaginary one-year calendar. The release of this carbon – however – is changing our climate at such a rapid rate that it threatens our survival and presence on earth. It defies imagination that so much damage has been done in such a relatively short time. The implications of climate change is the single most significant threat to life on earth and, put simply, we are not doing enough to rectify the damage.

This relatively very recent ability to change our climate is an inconvenient truth; the science is sound. We know of the complex set of interrelated national and global security risks that are a result of global warming and the velocity at which climate change is occurring. We worry it may already be too late.

Climate change writ large has informed few, interested some, confused many, and polarized politics. It has already led to an increase in natural disasters including but not limited to droughts, storms, floods, fires etc. The year 2012 was among the 10 warmest years on record according to an American Meteorological Society (AMS) report. Research suggests that climate change is already affecting human displacement; reportedly 36 million people were displaced in 2008 alone because of sudden natural disasters. Figures for 2010 and 2011 paint a grimmer picture of people displaced because of rising sea levels, heat and storms.

Climate change affects all natural systems. It impacts temperature and consequently it affects water and weather patterns. It contributes to desertification, deforestation and acidification of the oceans. Changes in weather patterns may mean droughts in one area and floods in another. Counter-intuitively, perhaps, sea levels rise but perennial river water supplies are reduced because glaciers are retreating.

As glaciers and polar ice caps melt, there is an albedo effect, which is a double whammy of less temperature regulation because of less surface area of ice present. This means that less absorption occurs and also there is less reflection of the sun’s light. A potentially critical wild card could be runaway climate change due to the release of methane from melting tundra. Worldwide permafrost soils contain about 1,700 Giga Tons of carbon, which is about four times more than all the carbon released through human activity thus far.

The planet has already adapted itself to dramatic climate change including a wide range of distinct geologic periods and multiple extinctions, and at a pace that it can be managed. It is human intervention that has accelerated the pace dramatically: An increased surface temperature, coupled with more severe weather and changes in water distribution will create uneven threats to our agricultural systems and will foster and support the spread of insect borne diseases like Malaria, Dengue and the West Nile virus. Rising sea levels will increasingly threaten our coastal population and infrastructure centers and with more than 3.5 billion people – half the planet – depending on the ocean for their primary source of food, ocean acidification may dangerously undercut critical natural food systems which would result in reduced rations.

Climate change also carries significant inertia. Even if emissions were completely halted today, temperature increases would continue for some time. Thus the impact is not only to the environment, water, coastal homes, agriculture and fisheries as mentioned, but also would lead to conflict and thus impact national security. Resource wars are inevitable as countries respond, adapt and compete for the shrinking set of those available resources. These wars have arguably already started and will continue in the future because climate change will force countries to act for national survival; the so-called Climate Wars.

As early as 2003 Greenpeace alluded to a report which it claimed was commissioned by the Pentagon titled: An Abrupt Climate Change Scenario and Its Implications for U.S. National Security. It painted a picture of a world in turmoil because global warming had accelerated. The scenario outlined was both abrupt and alarming. The report offered recommendations but backed away from declaring climate change an immediate problem, concluding that it would actually be more incremental and measured; as such it would be an irritant, not a shock for national security systems.

In 2006 the Center for Naval Analyses (CNA) – Institute of Public Research – convened a board of 11 senior retired generals and admirals to assess National Security and the Threat to Climate Change. Their initial report was published in April 2007 and made no mention of the potential acceleration of climate change. The team found that climate change was a serious threat to national security and that it was: “most likely to happen in regions of the world that are already fertile ground for extremism.” The team made recommendations from their analysis of regional impacts which suggested the following. Europe would experience some fracturing because of border migration. Africa would need more stability and humanitarian operations provided by the United States. The Middle East would experience a “loss of food and water security (which) will increase pressure to emigrate across borders.” Asia would suffer from “threats to water and the spread of infectious disease. ” In 2009 the CIA opened a Center on Climate Change and National Security to coordinate across the intelligence community and to focus policy.

In May 2014, CNA again convened a Military Advisory Board but this time to assess National Security and the Accelerating Risk of Climate Change. The report concludes that climate change is no longer a future threat but occurring right now and the authors appeal to the security community, the entire government and the American people to not only build resilience against projected climate change impacts but to form agreements to stabilize climate change and also to integrate climate change across all strategy and planning. The calm of the 2007 report is replaced by a tone of anxiety concerning the future coupled with calls for public discourse and debate because “time and tide wait for no man.”

The report notes a key distinction between resilience (mitigating the impact of climate change) and agreements (ways to stabilize climate change) and states that:

Actions by the United States and the international community have been insufficient to adapt to the challenges associated with projected climate change. Strengthening resilience to climate impacts already locked into the system is critical, but this will reduce long-term risk only if improvements in resilience are accompanied by actionable agreements on ways to stabilize climate change.

The 9/11 Report framed the terrorist attacks as less of a failure of intelligence than a failure of imagination. Greenpeace’s 2003 account of the Pentagon’s alleged report describes a coming climate Armageddon which to readers was unimaginable and hence the report was not really taken seriously. It described:

A world thrown into turmoil by drought, floods, typhoons. Whole countries rendered uninhabitable. The capital of the Netherlands submerged. The borders of the U.S. and Australia patrolled by armies firing into waves of starving boat people desperate to find a new home. Fishing boats armed with cannon to drive off competitors. Demands for access to water and farmland backed up with nuclear weapons.

The CNA and Greenpeace/Pentagon reports are both mirrored by similar analysis by the World Bank which highlighted not only the physical manifestations of climate change, but also the significant human impacts that threaten to unravel decades of economic development, which will ultimately foster conflict.

Climate change is the quintessential “Tragedy of the Commons,” where the cumulative impact of many individual actions (carbon emission in this case) is not seen as linked to the marginal gains available to each individual action and not seen as cause and effect. It is simultaneously huge, yet amorphous and nearly invisible from day to day. It is occurring very fast in geologic time terms, but in human time it is (was) slow and incremental. Among environmental problems, it is uniquely global. With our planet and culture figuratively and literally honeycombed with a reliance on fossil fuels, we face systemic challenges in changing the reliance across multiple layers of consumption, investment patterns, and political decisions; it will be hard to fix!

## Case

### A2 Technocracy Bad

#### technocracy is the only hope in the context of climate policy – laypeople are incapable of interpreting data to achieve the consensus necessary to combat warming – mass death outweighs the risk of corporatism

Venkatesh Rao 15 [(Venkatesh Rao, ) Why Solving Climate Change Will Be Like Mobilizing for War, Atlantic 10-15-2015] AT

It’s clear that the market is unlikely to solve the problem of climate change on its own. If scientists are right, and there is no reason to think they aren’t, averting climate change will require such large-scale, rapid action, that no single energy technology, new or emerging, could be the solution. Neither could any single non-energy technology, such as video-conferencing as a substitute for travel, solve the problem on its own. There is always a possibility that a single cheap and effective solution will emerge, rendering expensive interventions moot, but few climate experts are willing to trust the future to that unlikely prospect. The challenge therefore, is one of rapid, concerted deployment of a portfolio of emerging and mature energy and non-energy technologies. This means accepting a certain level of attendant risks. The Volkwagen emissions scandal illustrates these risks well: Aggressive forcing, through EU policy instruments, of the adoption of diesel engines (which are better suited to reducing emissions) created incentives that led to sophisticated gaming. What Gates and others are advocating for is not so much a technological revolution as a technocratic one. The Volkswagen scandal won’t be the last or the worst. Unlike many of the other objections put forth by climate skeptics, the objection that managing moral hazards at a planetary scale might prove impossible is a solid one. Assuming we do manage to significantly accelerate deployment without cancerous levels of corporatist corruption, if emissions targets still remain out of reach, some growth must be temporarily sacrificed. At the same time, investment across the portfolio of energy technologies will need to continue. In other words, we are contemplating the sorts of austerities associated with wartime economies. For ordinary Americans, austerities might include an end to expansive suburban lifestyles and budget air travel, and an accelerated return to high-density urban living and train travel. For businesses, this might mean rethinking entire supply chains, as high-emissions sectors become unviable under new emissions regimes. What Gates and others are advocating for is not so much a technological revolution as a technocratic one. One for which there is no successful peacetime precedent. Which is not to say, of course, that it cannot work. There is always a first time for every new level of complexity and scale in human cooperation. But it’s sobering to look back at the (partial) precedents we do have. Of the previous six energy revolutions of comparable magnitude—wind, water, coal, oil, electricity, and nuclear—only nuclear power had anywhere near the same level of early-stage technocratic shaping that we are contemplating. Among technological revolutions outside the energy sector, only space exploration, nuclear-weapons technology, and computing technology have had similar levels of bureaucratic direction. None of these are true comparables, however, for one critical reason. In each historical case, the revolution was highly focused on a single core technology rather than a broad portfolio of technologies, and a managed transition of infrastructure at civilization scale. In the case of aerospace and computing technologies, the comparison is even weaker: Those sectors enjoyed several decades of organic evolution driven primarily by inventors, private investors, and market forces before technocrats got involved. Even in the most relevant precedent, the response to ozone depletion, the technical challenge was to develop substitutes for one specific class of chemicals (CFCs) with a relatively narrow range of applications in refrigeration and aerosols. Climate change offers up no conveniently terrifying dictator, against whom to rally the troops and general population. Precedents in public health, civil engineering, epidemiology, and public safety offer clearer examples of technocrat-led revolutions. But those transitions were far simpler, technologically, than a retooling of global energy infrastructure. Properly qualified, there is only one successful precedent for the kind of technological mobilization we are contemplating: the mobilization of American industry during World War II. The proposed climate change war—and no other term is suitable given the scale, complexity, and speed of the task—requires a level of trust in academic and energy-sector public institutions (including international ones) comparable to the trust placed in military institutions during times of war. The significant political difference is that climate change offers up no conveniently terrifying dictator, against whom to rally the troops and general population. Without a sufficiently charismatic narrative, casualties will go largely unacknowledged, like the victims of the Spanish Flu epidemic of 1918 (which caused about twice as many deaths as World War I, but is barely remembered today outside of public-health circles). What climate change does offer in place of an evil dictator though, is a powerful appeal to parental instincts. The degree to which we are able to prevent future pain will depend strongly on the ability of politicians to establish the narrative that we must allocate high costs today, while we can still afford them, in order to save unborn generations from avertable disasters. In a time of war, the alternative to trusting the military and defense establishments is leaving all action to guerilla militias in occupied territories. In the war against climate change, the alternative to trusting technocrats, regulatory machinery, and public institutions is to trust small-scale libertarian ingenuity to bail out Bangladesh in the event of large-scale climate-change. That’s not likely to happen. We either trust public institutions, based on specialized expertise, and accept the risk that they might be wrong, as in the case of the intelligence establishment and WMDs in Iraq—or we limit collective action to issues where it is possible to achieve informed consensus among laypersons. The last time that was a realistic possibility in a major economy was before the rise of the Interstate Commerce Commission in the United States in 1887. This is not a comforting conclusion, but then, no decision to mobilize on a large scale for a war-like collective action ever is. So it is important to understand that this is the decision under consideration. In the war against climate change, powerful technocrats will be far more consequential than energy-sector technologists. We are not being asked to understand, en masse, the intricacies of climate science and technology deployment any more than the population of a nation at war is asked to understand the intricacies of intelligence gathering or military campaign planning. We are being asked to trust the integrity and declared intentions of institutions that do understand the intricacies. We are being asked to trust that despite any de facto ideological biases, professionalism will prevail. In the war against climate change, powerful technocrats will be far more consequential than energy-sector technologists. Think of Colonel John Boyd, widely regarded as the architect of modern American military strategy, and a renowned master of bureaucratic warfare within the Pentagon. Think of Admiral Hyman Rickover, widely credited for the extraordinary safety record of the U.S. nuclear-submarine fleet. Boyd and Rickover were exemplars of bureaucratic heroism. Both were highly effective, but largely anonymous technocrats, maneuvering imaginatively within public institutions to deploy public resources. These will be the heroes in the war against climate change. To the extent that energy technocrats are able to maneuver around bureaucratic inertia, investments at the levels suggested by Gates might pay off, and the response to climate change has a shot at success. There are early signs that this is happening. California regulator Mary Nichols’s battles with the auto industry to accelerate the adoption of electric cars in California are reminiscent of Boyd’s legendary battles with the military-industrial complex in the development of highly effective combat aircraft like the F16. Reposing this kind of trust in public officials can seem dangerous, but as the recent vaccine debates showed, it is even more dangerous to trust uninformed, but ideologically strident and media-savvy interest groups being misled by charismatic non-institutional figures. Lay skeptics can be relied upon to tease out the hypocrisies and obvious lies of politicians, but are far too easily misled on scientific matters. To rely on mobs to correctly interpret Sankey diagrams and ocean-acidification chemistry is like trusting a high-school football coach to correctly interpret the battle plans for the invasion of an enemy nation. Or trusting a Hollywood celebrity to meaningfully opine on vaccine biochemistry and epidemiological models. The pragmatic path is to trust that the technocrats in charge will fight the necessary bureaucratic battles to win in time to make a difference. Climate change is not a game for amateurs. The evolving nature of the science, and the possibility (always present in science) that some of today’s beliefs might be overturned by new evidence and models, is not a reason to second guess scientists or trust conspiracy theorists instead. That doesn’t mean we don’t risk corporatist corruption, cronyism, and outright wartime profiteering. But we do not yet know how to act beyond a certain scale and speed without those risks. So a technocrat-led, government-coordinated international response is probably necessary. Can it work? Like many technologists whose opinions have been shaped by Internet-era technologies, I’d like to see the institutions we are being asked to trust adopt some of the operating mechanisms I have grown to trust. Like many, including presumably Bill Gates, I hope the climate war will be fought with agile, open processes, networked organizational forms, and a great deal more autonomy for low-level actors than technocracies have historically been willing to cede. I’d also like claims to professional authority on the part of frontline actors to be based on visible accomplishments rather than credentials. I hope the action (or inaction, rather) will not be driven by gridlocked committees inching towards ineffective and expensive compromises with excruciating slowness, after hundreds of thousands of Bangladeshis and Sub-Saharan Africans have already lost their lives or livelihoods. But to base decisions on comparisons between imaginary more-perfect institutions that might exist, and flawed, but slowly evolving institutions that do exist, is a perfect example of the nirvana fallacy. The pragmatic path is to trust that the technocrats in charge will fight the necessary bureaucratic battles with sufficient skill and professionalism to actually win in time to make a difference. Can this work? There’s a slim chance, but it’s probably the best chance we have. And even a small chance of preventing massive misery in parts of the world (and periods of the future) that did not cause the problem, is worth taking.

### A2 Standpoint Epist

#### Maximizing all lives is the only way to affirm equality

Cummiskey 96 – Professor of Philosophy, Bates (David, Kantian Consequentialism, Ethics 100.3, p 601-2, p 606, jstor, AG)

We must not obscure the issue by characterizing this type of case as the sacrifice of individuals for some abstract "social entity." It is not a question of some persons having to bear the cost for some elusive "overall social good." Instead, the question is whether some persons must bear the inescapable cost for the sake of other persons. Nozick, for example, argues that "to use a person in this way does not sufficiently respect and take account of the fact that he is a separate person, that his is the only life he has."30 Why, however, is this not equally true of all those that we do not save through our failure to act? By emphasizing solely the one who must bear the cost if we act, one fails to sufficiently respect and take account of the many other separate persons, each with only one life, who will bear the cost of our inaction. In such a situation, what would a conscientious Kantian agent, an agent motivated by the unconditional value of rational beings, choose? We have a duty to promote the conditions necessary for the existence of rational beings, but both choosing to act and choosing not to act will cost the life of a rational being. Since the basis of Kant's principle is "rational nature exists as an end-in-itself' (GMM, p. 429), the reasonable solution to such a dilemma involves promoting, insofar as one can, the conditions necessary for rational beings. If I sacrifice some for the sake of other rational beings, I do not use them arbitrarily and I do not deny the unconditional value of rational beings. Persons may have "dignity, an unconditional and incomparable value" that transcends any market value (GMM, p. 436), but, as rational beings, persons also have a fundamental equality which dictates that some must sometimes give way for the sake of others. The formula of the end-in-itself thus does not support the view that we may never force another to bear some cost in order to benefit others. If one focuses on the equal value of all rational beings, then equal consideration dictates that one sacrifice some to save many. [continues] According to Kant, the objective end of moral action is the existence of rational beings. Respect for rational beings requires that, in deciding what to do, one give appropriate practical consideration to the unconditional value of rational beings and to the conditional value of happiness. Since agent-centered constraints require a non-value-based rationale, the most natural interpretation of the demand that one give equal respect to all rational beings lead to a consequentialist normative theory. We have seen that there is no sound Kantian reason for abandoning this natural consequentialist interpretation. In particular, a consequentialist interpretation does not require sacrifices which a Kantian ought to consider unreasonable, and it does not involve doing evil so that good may come of it. It simply requires an uncompromising commitment to the equal value and equal claims of all rational beings and a recognition that, in the moral consideration of conduct, one's own subjective concerns do not have overriding importance.

### A2 State of Exception

#### Democracy solves the impact to biopolitics

Dickinson 04 University of Cincinnati [Edward Ross, “Biopolitics, Fascism, Democracy: Some Reflections on Our Discourse About “Modernity,” Central European History, vol. 37, no. 1, March]

In an important programmatic statement of 1996 Geoff Eley celebrated the fact that Foucault’s ideas have “fundamentally directed attention away from institutionally centered conceptions of government and the state . . . and toward a dispersed and decentered notion of power and its ‘microphysics.’”48 The “broader, deeper, and less visible ideological consensus” on “technocratic reason and the ethical unboundedness of science” was the focus of his interest.49 But the “power-producing effects in Foucault’s ‘microphysical’ sense” (Eley) of the construction of social bureaucracies and social knowledge, of “an entire institutional apparatus and system of practice” ( Jean Quataert), simply do not explain Nazi policy.50 The destructive dynamic of Nazism was a product not so much of a particular modern set of ideas as of a particular modern political structure, one that could realize the disastrous potential of those ideas. What was critical was not the expansion of the instruments and disciplines of biopolitics, which occurred everywhere in Europe. Instead, it was the principles that guided how those instruments and disciplines were organized and used, and the external constraints on them. In National Socialism, biopolitics was shaped by a totalitarian conception of social management focused on the power and ubiquity of the völkisch state. In democratic societies, biopolitics has historically been constrained by a rights-based strategy of social management. This is a point to which I will return shortly. For now, the point is that what was decisive was actually politics at the level of the state. A comparative framework can help us to clarify this point. Other states passed compulsory sterilization laws in the 1930s — indeed, individual states in the United States had already begun doing so in 1907. Yet they did not proceed to the next steps adopted by National Socialism — mass sterilization, mass “eugenic” abortion and murder of the “defective.” Individual figures in, for example, the U.S. did make such suggestions. But neither the political structures of democratic states nor their legal and political principles permitted such policies actually being enacted. Nor did the scale of forcible sterilization in other countries match that of the Nazi program. I do not mean to suggest that such programs were not horrible; but in a democratic political context they did not develop the dynamic of constant radicalization and escalation that characterized Nazi policies.

#### they can't solve biopolitical control – NSA surveillance, Guantanamo bay, drone strikes, and American military presence abroad prove that nuclear power is only a tiny facet of a vast bureaucracy

#### link chains – if our disad links are wrong, then the aff needs to point those flaws out, not make sweeping claims about disads in general

### Kaur

#### Their Kaur ev criticizes the nuclear industry for lack of cost-benefit analysis – that feeds our policymaking arguments since they need to engage with the link chain of the DA rather than rejecting every reason that nuclear power is good

#### This assumes that nuclear power increases warming – we've won they're key to reduce emissions which disproves their epistemology arguments

#### Even after accounting for every step of nuclear power, they still reduce emissions

Weisser 7 [Daniel Weisser, "A guide to life-cycle greenhouse gas (GHG) emissions from electric supply technologies," IAEA, 2007] AZ

Increasing the use of nuclear power From a GHG emission perspective nuclear power plants (i.e. LWR) are very attractive since they have a huge GHG life-cycle reduction potential when displacing fossil fuel fired power plants, as well as the ability to provide energy services similar to most fossil fuel based energy technologies9 . Figure 5 shows that on average LWRs have the second lowest life-cycle GHG emissions of all assessed technologies

### A2 Neg is a Lie

#### They'll say that disads are influenced by the nuclear industry but –

#### Their criticism assumes that a consensus of scientists across countries and cultures are in on it – assign low risk

#### We're not biased but they are – anti-nuclear lobbyists are funded by Big Oil

Adams 13 [Smoking gun: Robert Anderson provided initial funds to form Friends of the Earth," Atomic Insights, 8/4/2013] AZ

However, the man who gave $200,000 to David Brower to found Friends of the Earth in 1970 was definitely Robert O. Anderson, CEO of Atlantic Richfield, President of the Aspen Institute and founder of the John Muir Foundation. He is still (figuratively, speaking, since he passed away in 2007) holding a smoking gun as a well-placed member of the international petroleum industry who helped to establish the antinuclear movement with money and a political push. King Saud may not have taken Anderson’s threat very seriously in 1956, because at that time there were no commercial nuclear plants in operation. It might also have been that he recognized that if the American government had helped nuclear energy to become “much cheaper and more efficient than oil”, it would have been harming the economic interests of some of its most powerful people, especially if it rendered “petroleum reserves worthless.” At the time, the world’s oil industry was dominated by the Seven Sisters, five of which were American-based oil companies with ties to the Rockefeller trusts. It is perfectly logical for a man like Robert O. Anderson, with his extensive ties to oil, coal and gas, to provide financial support to promote the energy strategies of a man like Amory Lovins, who has built his entire career on promoting virtually all energy sources other than nuclear energy. End Update. I hope you agree that this is one of the clearest ‘smoking guns’ that directly links money and influence from the oil and gas industry to the effort to discourage the use of nuclear energy. Sometimes it pays to keep reading, searching, highlighting and dog earing books. Connections like this one are not easy to find, especially since there is plenty of motive to obscure the relationships that matter.

### Fossil Fuels Turn

#### Fossil fuels are more undemocratic, encourage corporate control, and increase corruption

Butler & Robbins 16 [Kaitlin Butler (project director at the Science and Environmental Health Network and an organizer of the 2014 Women’s Congress.) and Patrick Robbins, "Fever Pitch: This Crucial Moment In The Fight To Stop Fossil Fuel Infrastructure," Common Dreams, 4/12/2016] AZ

That the government continues to lease land for extraction during a historic oil glut—while also effectively denying the scientific consensus on climate change—reveals that it is not only corporate interests who see their primary role as maximizing short-term revenue over the long-term trusteeship of the commons. Often, public agencies do too.

In response, organizers in Utah are coming together around a common alternative agenda. Climate justice groups like Utah Tar Sands Resistance, Peaceful Uprising, Canyon Country Rising Tide, and Elders Rising for Intergenerational Justice are leading public protests and nonviolent direct actions. Joining them as allies are concerned environmental and public health groups like Utah Physicians for a Healthy Environment, Utah Moms for Clean Air, Living Rivers, and the Mormon Environmental Stewardship Alliance, which have made the connections between their traditional issues and climate change.

Their nonviolent strategy is to build opposition and delay operations, not to interfere with the livelihoods of workers. Central to the climate justice groups’ organizing is the recognition of environmental racism inherent in these energy projects, many of which are on or adjacent to Indian lands. Organizers are also tying local narratives to national initiatives. The most recent disruptions of Utah’s BLM oil and gas lease auctions was organized by grassroots groups partnering with each other and the broader “Keep It in the Ground” campaign. Partnerships like these give local groups access to resources and a broader media outreach. Conversely, the national campaigns are only effective because of actions that are directly shaped by their local contexts.

In the Northeast, resistance to fracked gas infrastructure is growing in strength. The fight was certainly helped by New York Governor Andrew Cuomo’s decision to ban fracking in December 2014—the movement as a whole got a shot in the arm, and New York-based organizations that previously had focused on obtaining a drilling ban were freed up to focus more directly on the system of pipelines, compressor stations, and power plants that compose the full ecosystem of fracked gas.

But make no mistake: the grassroots have been opposing fracked gas infrastructure long before any statewide or nationwide organizations were making it a priority. Groups like FANG, We Are Seneca Lake, ResistAIM, Rising Tide Vermont, Stop the West Roxbury Lateral, and Protect Orange County have launched civil disobedience campaigns in which hundreds of people have been arrested to protect their communities, while others such as Stop the Pipeline, SEnRG, CELDF and many others have initiated canny legal and political battles. The momentum against fracked gas infrastructure is undeniable.

And it’s in reaction to a full-scale onslaught by the fracking industry. Beginning in 2006, we witnessed a drilling boom in the Northeast states (most notably in Pennsylvania) thanks to their location above a gas-rich shale formation known as the Marcellus Shale. All of that gas must get to market, be pressurized, and (in many cases) converted into generation power, so the production boom spurred a contemporaneous boom in fracked gas infrastructure. Pipelines and compressor stations are crisscrossing the northeast, cutting through pristine wilderness, small farms, and rural communities (for a map of this infrastructure in New York State, visit YOU ARE HERE).

In both Utah and New York, the specific qualities of the fossil fuel infrastructure threat—its geographic distribution across varied communities, the undemocratic manner in which projects are approved, the utter lack of redress through standard legal and regulatory channels—have shaped the character of its resistance. The groups fighting back tend to follow a common narrative: pockets of neighbors, most of whom were not involved in activism before, learned about a threat to their homes and began to explore the regulatory options available for stopping the project. As they go through the process and reach out to other groups, they go through a terrible learning curve—no one is going to save them (the Federal Energy Regulatory Commission, whose ostensible purpose is to regulate interstate gas infrastructure projects, has been commandeered by industry, and many commissioners have long histories of working for the very companies they purport to oversee).

This radicalizes many groups and drives them toward escalating forms of resistance. All the preconditions are met for what Francis Fox Piven calls a “poor people’s movement”—spontaneous, nonhierarchical, authentically grassroots action, driven by actors whose lives and communities are directly impacted by the success or failure of the uprising.

#### Denying developing countries nuclear power is unequal and violates their sovereignty

Chowdhury 12 [Navid Chowdhury (thesis for Stanford University), "Nuclear Energy For Developing Countries," November 2012] AZ

Access to energy is regarded as the basic requirement for economic growth. And yet 1.5 billion people in the world today don't have access to the basic form of energy, electricity. [1] Almost all of that population lives in the developing countries. As these countries grow (both in population and economically) the demand for energy keeps growing and unless immediate solutions are sought there then the current energy shortage in these countries will turn acute. Under these circumstances, recently 50 non-OECD countries approached IEA with plans to install nuclear reactors in their own countries. Some of those countries had already started talks with current nuclear-able countries like Japan to purchase the technology required to install their first nuclear reactors.

Why Nuclear

It is the most reliable and clean source of energy for any emerging economy under current scenario. Although there are other safer and cleaner options like wind and solar but the battery technology is still at a stage which makes the later options less practical on a large scale. Nuclear reactors can provide safe baseload power on a large scale while taking the dependence away from oil and gas. It also does not have the intermittency problem that plagues most of the frontline renewable energy technologies we know of.

Besides the technological aspect, it also offers the host country the independence and the energy security that is essential for the economic and political stability of the country. The recent protest in Nigeria is an unfortunate example of how volatility of fuel price could lead to a major political breakdown and subsequently affect the economic growth of the country. [2] Nuclear power could remove that volatility.

Energy security would also allow countries to be more sovereign is its decision making. Developing countries like Bangladesh quiet often has to make the very unpopular decision to raise fuel price (by cutting down subsidy) at the request of IMF who holds the key to most forms of aid provided to developing countries. [3] Removing dependence on fossil fuel would remove Bangladesh from such obligations set by IMF.

#### Outweighs the aff – ensures that entire POPULATIONS are excluded, not just a few sections within a country

### A2 Security Logic

#### Turn – institutionalizing fear into politics is key to check the violent excesses of securitization

Williams 11 (Michael, Graduate School of Public and International Affairs, University of Ottawa, “Securitization and the liberalism of fear,” Security Dialogue August-October 2011 vol. 42 no. 4-5 453-463)

In this vision, fear is central to liberal politics, but in a way very different from those visions that see fear, emergency and ‘security’ as the defining ‘outside’ of liberal societies, as the antithesis of normal politics, or, as suggested in other analyses, as the constitutive realm or radical otherness or enmity that stabilizes and/or energizes otherwise decadent or depoliticized liberal orders. 9 For the liberalism of fear, fear cannot and should not be always and in every way avoided. For one thing, it is an inescapable part of life, something that often helps preserve us from danger. More complexly, fear can also be a crucial element in preserving as well as constructing a liberal order, for one of the major things to be feared in social life is the fear of fear itself. As Shklar (1998: 11) puts it in one of her most evocative phrasings: To be alive is to be afraid, and much to our advantage in many cases, since alarm often preserves us from danger. The fear we fear is of pain inflicted by others to kill and maim us, not the natural and healthy fear that merely warns us of avoidable pain. And, when we think politically, we are afraid not only for ourselves but for our fellow citizens as well. We fear a society of fearful people. This vision of liberal politics fears the politics of fear. It fears above all collective concentrations of power that make possible ‘institutionalized cruelty’, particularly when they are abetted or accompanied by a politics of fear. Thus, while the liberalism of fear fears all concentrations of power, it fears most the concentration of power in that most fearsome of institutions in the modern world – the state; for while cruelty can reflect sadistic urges, ‘public cruelty is not an occasional personal inclination. It is made possible by differences in public power’ (Shklar, 1998: 11). A degree of fear and coercion is doubtless a condition of the operation of all social orders; but, as its first order of concern, the liberalism of fear focuses on restraining fear’s excesses. As Shklar (1998: 11) puts it: A minimal level of fear is implied in any system of law, and the liberalism of fear does not dream of an end to public, coercive government. The fear it does want to prevent is that which is created by arbitrary, unexpected, unnecessary, and unlicensed acts of force and by habitual and pervasive acts of cruelty and torture performed by military, paramilitary and police agents in any regime. The liberalism of fear is far from rejecting the state’s role in the provision of social goods, including security. Indeed, these may be essential in overcoming socially derived cruelties of many kinds. 10 But, it is continually alert to the state’s potential to do the opposite. 11 Here, then, is a vision of politics where fear is not confined to the realm of security; nor is fear wholly negative. Such a vision shares with the Copenhagen School the fear that fear in politics is dangerous. But, Shklar’s multidimensional analysis of fear allows us to see how fear can work as a counter-practice against processes of securitization. Fear operates in normal politics, and the fear of fear – that is, the fear of the power of the politics of security and its consequences – is a core part of liberal theory and practice. Fear is not a one-way street to extremity, nor does it operate only in emergency situations. Instead, the fear of fear can act as a bulwark against such processes. In other words, the fear of fear can within ‘normal’ or even ‘securitized’ politics act to prevent or oppose a movement toward a more intense politics of fear – countering a shift toward ‘security’ in its more extreme manifestations.

### A2 Mining Bad

#### Uranium mining is at the core of the African economy – empirics

Dasnois 12 [Nicholas Dasnois, Political analyst at the Governance of Africa’s Resources Programme, "Uranium Mining in Africa: A Continent at the Centre of a Global Nuclear Renaissance," South African Institute Of International Affairs, September, 2012] AZ

In all African uranium-producing countries barring South Africa, uranium mining revenues represent a considerable share of gross domestic product (GDP) and are set to increase. In 2008, 4% of Namibia’s GDP came from uranium mining; a figure that could increase to 13% in 2015.41 Malawi’s total government revenues in 2010 were about $1.12 billion, of which $1.6 million (1%) came from uranium mining.42 Mining companies also provide thousands of jobs. In Niger, Areva’s payroll totalled 4 950 in 201043 and the company claims to have created 10 000 jobs in all.44 Furthermore, either through contributions to government budgets or direct investments from the industry, uranium mining often improves local infrastructure. In the CAR Areva intends to invest in roads, health and education facilities and electricity supply, although whether or not all these investments materialise and directly benefit the population remains to be seen.45

#### Economic growth is the single best way to reduce poverty

Bhagwati 11 [(Jagdish, University Professor of Law and Economics at Columbia University, Senior Fellow at the Council on Foreign Relations, served in top-level advisory positions for the WTO and UN, Economic Policy Adviser to the Director-General, GATT, Special Adviser to the UN on globalization) “Does Redistributing Income Reduce Poverty?” Project Syndicate Oct. 27, 2011] AT

NEW YORK – Many on the left are suspicious of the idea that economic growth helps to reduce poverty in developing countries. They argue that growth-oriented policies seek to increase gross national product, not to ameliorate poverty, and that redistribution is the key to poverty reduction. These assertions, however, are not borne out by the evidence. Since the 1950’s, developmental economists have understood that growth in GNP is not synonymous with increased welfare. But, even prior to independence, India’s leaders saw growth as essential for reducing poverty and increasing social welfare. In economic terms, growth was an instrument, not a target – the means by which the true targets, like poverty reduction and the social advancement of the masses, would be achieved. A quarter-century ago, I pointed out the two distinct ways in which economic growth would have this effect. First, growth would pull the poor into gainful employment, thereby helping to lift them out of poverty. Higher incomes would enable them to increase their personal spending on education and health (as seems to have been happening in India during its recent period of accelerated growth). Second, growth increases state revenues, which means that the government can potentially spend more on health and education for the poor. Of course, a country does not necessarily spend more on such items simply because it has increased revenue, and, even if it does, the programs it chooses to fund may not be effective. In almost willful ignorance of the fact that the growth-centered model has proved itself time and again, skeptics advocate an alternative “redistributive” developmental model, which they believe will have a greater impact on reducing poverty. Critics of the growth model argue that it is imperative to redistribute income and wealth as soon as possible. They claim that the Indian state of Kerala and the country of Bangladesh are examples where redistribution, rather than growth, has led to better outcomes for the poor than in the rest of India. CommentsYet, as Columbia University economist Arvind Panagariya’s recent work shows, Kerala’s social statistics were better than those in the rest of the country even before it instituted its current redistributive model. Moreover, Kerala has profited immensely from remittances sent home by its émigré workers in the Middle East, a factor unrelated to its redistributive policy. As for Bangladesh, the United Nations’ Human Development Index, admittedly a problematic source, ranks it below India. In impoverished countries where the poor exceed the rich by a huge margin, redistribution would increase the consumption of the poor only minimally – by, say, a chapati a day – and the increase would not be sustainable in a context of low income and high population growth. In short, for most developing countries, growth is the principal strategy for inclusive development – that is, development that consciously includes the marginal and poorest members of a society.

### A2 Renewables

#### Nuclear is cost-competitive even without subsidies

WNN 15 ["Nuclear costs remain competitive, says IEA/NEA report," World Nuclear News, 9/1/2015] AZ

For baseload generation - combined cycle gas turbine, coal and nuclear - the study found nuclear to be the lowest cost option in all countries at a 3% discount rate. However, nuclear plants are more capital-intensive than either gas or coal, and this is reflected in increasing projected costs for nuclear at the 7% and 10% discount rates. Overnight costs for nuclear technologies in OECD countries ranges from $2021 per kWe of capacity (in Korea) to $6125 per kWe (in Hungary), but the levelised costs of electricity from nuclear, at the 3% discount rate, range from $29 per MWh (Korea) to $64 per MWh (United Kingdom). At the 7% discount rate the range increases to $40-101 per MWh and at 10% to 51-136 per MWh. The data also suggests that an increase in the costs of baseload generation noted in the 2010 report has halted. This is particularly notable for nuclear technologies, "undermining the growing narrative that nuclear costs continue to increase globally", the report concludes.

#### Renewables don't solve and are too slow

**Gross 16** Daniel Gross Executive Editor at strategy+business Harvard University A.M. “Why Renewable Power Can Still Be Wasteful” The Slate JULY 29 2016 12:38 PM

And yet, given the way the U.S. has gone about adding renewables to the grid, there actually is a fair amount of inefficiency and wasted energy. On any given day, a certain amount of wind and solar power is curtailed, as the term of art goes. Wind turbines, for example, get turned off even though the blades are still turning; the production of solar plants sometimes gets dialed down. In early July in California, for about an hour one afternoon, some 292 megawatts of solar capacity was curtailed—enough to power thousands of homes. Why do we have curtailment? Blame the herky-jerky way we roll out new technologies and build infrastructure in this country. Inefficiencies in new economic infrastructure aren’t exactly new. Because the state doesn’t centrally plan and roll out new technologies in a completely rational fashion—matching demand, distribution, and supply—wrinkles and bubbles develop. Incentives may be available for one component of the technology but not for others. And so overinvestment in one stage of the process coincides with underinvestment in another stage. Which is why we have bubbles. The earliest telegraph lines from Boston to New York City stopped at the Hudson River—and messages had to be carried across the Hudson on a boat. In the 1990s, information would travel at rapid speeds across the country on fast cables but slow down in the last mile. (I wrote a book about this in 2007.) The same has happened with wind and solar. There are significant government incentives to build wind and solar farms in the plains and deserts, where land is cheap and resources are plentiful. The U.S. renewable industries have figured out how to build and finance wind and solar farms at scale. But the transmission and the distribution systems, which don’t benefit from the same incentives, haven’t kept up. Transporting electricity involves stringing high-voltage lines across hundreds of miles of open space, across property owned by thousands of owners and multiple state lines. You can put up a giant solar farm or a wind farm in a matter of months. But as the travails of transmission-builder Clean Line Energy show, building the lines that will carry electrons from the places where they are created to the places they can be used can take decades. The design of the grid also works against efficiency. Texas maintains an electricity grid that is not connected to its neighboring states. And so when the huge wind farms built in the state generate power at times when demand is low, strange things can happen—like negative prices for their energy output. And even states in which grids are interconnected, there’s often a mismatch between demand and the amount of power generated during periods of peak usage in the late afternoon, leading to price spikes. And, of course, the very nature of renewables also works against efficiency. Plants powered by coal and natural gas can guarantee steady production over the course of the day, and dial output up and down with great precision as demand changes. But wind and solar are famously intermittent sources, so the task is harder. With solar, clouds and weather patterns can affect the intensity of solar radiation. The ability of solar panels to produce electricity varies dramatically over the course of the day. Winds can gust and die down in ways that defy easy prediction. So in the middle of the day, when solar panels are producing the maximum output and demand tends to be low, there may not be users for all the electricity being produced. And at night, when the wind blows powerfully and the world is asleep, there may not be takers for the power at any price. That’s when you get curtailment, or energy waste. Curtailment is most pronounced and frequent in energy islands: geographical islands like Hawaii and electricity islands like Texas. Generally speaking, wind power is the most likely to be curtailed. In 2009, some 17 percent of the wind generation in Texas was curtailed. But as the state built new transmission lines to connect the wind farms to population centers, the rate has declined. As this exhaustive report from the Energy Department notes: Only 0.5 percent of all wind generation within the coverage area of the Electric Reliability Council of Texas was curtailed in 2014, down from the peak of 17 percent in 2009. (Here’s a chart of curtailments in Texas between 2011 and 2014.)

#### Renewables kill the environment and accelerate warming

Independence Institute 4 (Colorado's Free Market Think Tank, "Issue Backgrounder: The False Panacea of Renewable Energy," i2i.org/articles/2004-B.pdf acc 9-11-04//uwyo-ajl)

Renewable energy sources such as wind, hydro, solar, and biomass are viewed by many as superior to coal, gas, and other non-renewables. Eventually, some or all of these forms of energy may be viable. However, **government subsidies and incentives for renewables can create more problems than they solve.** The Environmental Cost of **Renewables Most renewable sources of energy come at a steep environmental cost. Kilowatt for kilowatt, wind farms consume up to 200 times as much land as gas-fi red power plants. Wind turbines also kill thousands of birds each year, especially raptors** such as eagles, hawks, and vultures. Based on estimates of the number of birds killed by existing wind farms, energy expert Robert Bradley calculates that, **if one-quarter of U.S. energy came from wind, the turbines would kill more than a million birds a year. Efforts by the wind power industry to solve this problem have so far proven unsuccessful.** Where wind turbines kill birds, **hydroturbines kill fi sh**

. In an effort to recover Pacifi c Northwest salmon, the Bonneville Power Administration has an expensive program of capturing and trucking fi sh around its Columbia River dams. The pools created behind hydroelectric dams are also harmful to the habitats of many fish. Because of the cost to fi sheries, many environmentalists support “non-hydro renewables.” **Biomass energy produces signifi cant air pollution, including carbon dioxide, nitrogen oxides, and particulates**. In some cases, **biomass can produce more carbon dioxide, a greenhouse gas, than coal-fi red power plants**. Like wind, **solar power requires a lot of land**—some 5 to 10 acres per megawatt of power. **Solar energy panel manufacture also produces serious toxic wastes, including arsenic, gallium, and cadmium**. This photo of a raptor killed by a wind turbine was used on the cover of Wind Power Monthly in 1994 to alert the industry to the problem. Despite efforts by the industry to stop the bird deaths, the Los Angeles Times reports that California’s wind farms still kill thousands of birds each year.

### Phase-Out Bad

#### Turn - Attempts to phase out nuclear power increases emissions and accidents – Sweden proves

Qvist and Brook 15 - Staffan A. Qvist- Department of Physics and Astronomy, Uppsala University, Sweden; Barry W. Brook - Faculty of Science, Engineering and Technology, University of Tasmania, Australia: 4 May 2015 (“Environmental and health impacts of a policy to phase out nuclear power in Sweden” Elseiver Ltd. Journal of Energy Policy, p. 1, Available Online at http://www.karnteknik.se/upload/aktiviteter/medlemsaktiviteter/20151009\_Staffan%20Qvists%20Energy%20Policy.pdf, Accessed 8/8/16)IG

Nuclear power faces an uncertain future in Sweden. Major political parties, including the Green party of the coalition-government have recently strongly advocated for a policy to decommission the Swedish nuclear fleet prematurely. Here we examine the environmental, health and (to a lesser extent) economic impacts of implementing such a plan. The process has already been started through the early shutdown of the Barsebäck plant. We estimate that the political decision to shut down Barsebäck has resulted in 2400 avoidable energy-production-related deaths and an increase in global CO2 emissions of 95 mil- lion tonnes to date (October 2014). The Swedish reactor fleet as a whole has reached just past its halfway point of production, and has a remaining potential production of up to 2100 TWh. The reactors have the potential of preventing 1.9–2.1 gigatonnes of future CO2-emissions if allowed to operate their full life- spans. The potential for future prevention of energy-related-deaths is 50,000–60,000. We estimate an 800 billion SEK (120 billion USD) lower-bound estimate for the lost tax revenue from an early phase-out policy. In sum, the evidence shows that implementing a ‘nuclear-free’ policy for Sweden (or countries in a similar situation) would constitute a highly retrograde step for climate, health and economic protection.

### 2NR – A2 Germany

#### Germany phase out led to significantly more coal, with ¼ of electricity being nuclear beforehand.

**WNA 16** “Nuclear Power in Germany” (Updated 6 July 2016) http://www.world-nuclear.org/information-library/country-profiles/countries-g-n/germany.aspx

Germany until March 2011 obtained one-quarter of its electricity from nuclear energy, using 17 reactors. The figure is now about 16% from eight reactors. A coalition government formed after the 1998 federal elections had the phasing out of nuclear energy as a feature of its policy. With a new government in 2009, the phase-out was cancelled, but then reintroduced in 2011, with eight reactors shut down immediately. The cost of attempting to replace nuclear power with renewables is estimated by the government to amount to some €1000 billion without any assurance of a reliable outcome, and with increasing reliance on coal, especially lignite. Public opinion in Germany remains broadly opposed to nuclear power with virtually no support for building new nuclear plants. Almost half of Germany’s electricity is generated from coal, and there are no plans to phase this out. Germany has some of the lowest wholesale electricity prices in Europe and some of the highest retail prices, due to its energy policies. Taxes and surcharges account for more than half the domestic electricity price.